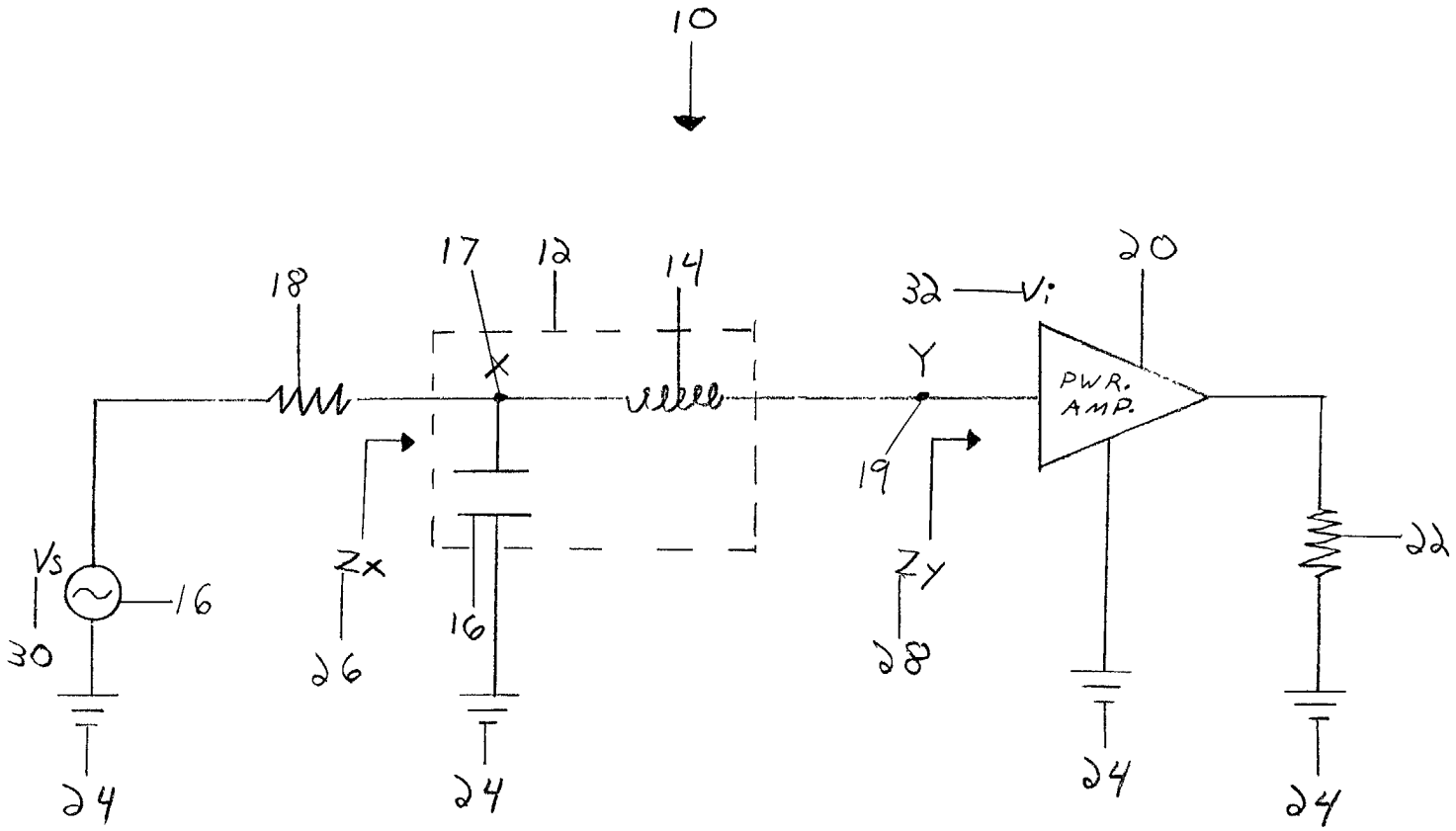
10
17
12
14
18
20
32
Vi
Y
PWR.
AMP.
19
Vs
16
Zx
26
16
Zy
28
22
30
24
24
24
24

FIG. 1

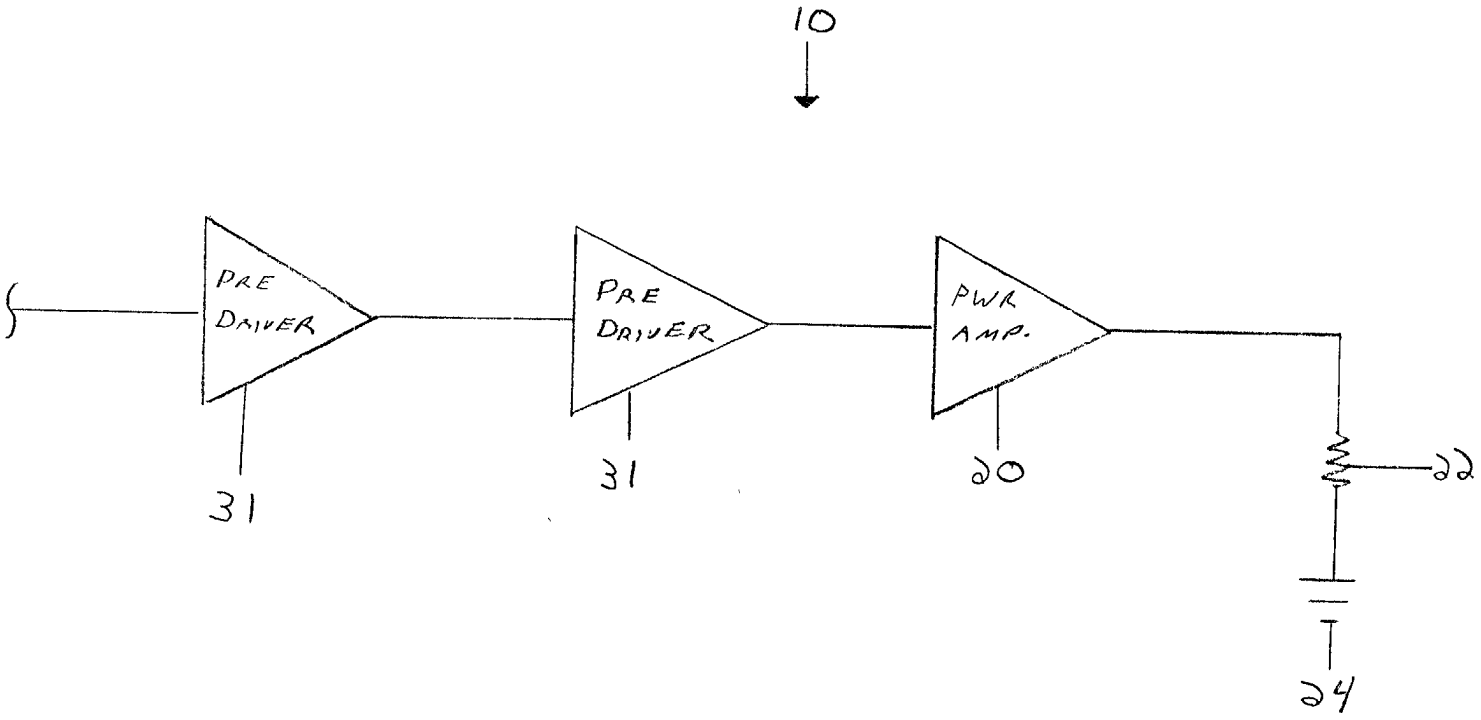


FIG. 2

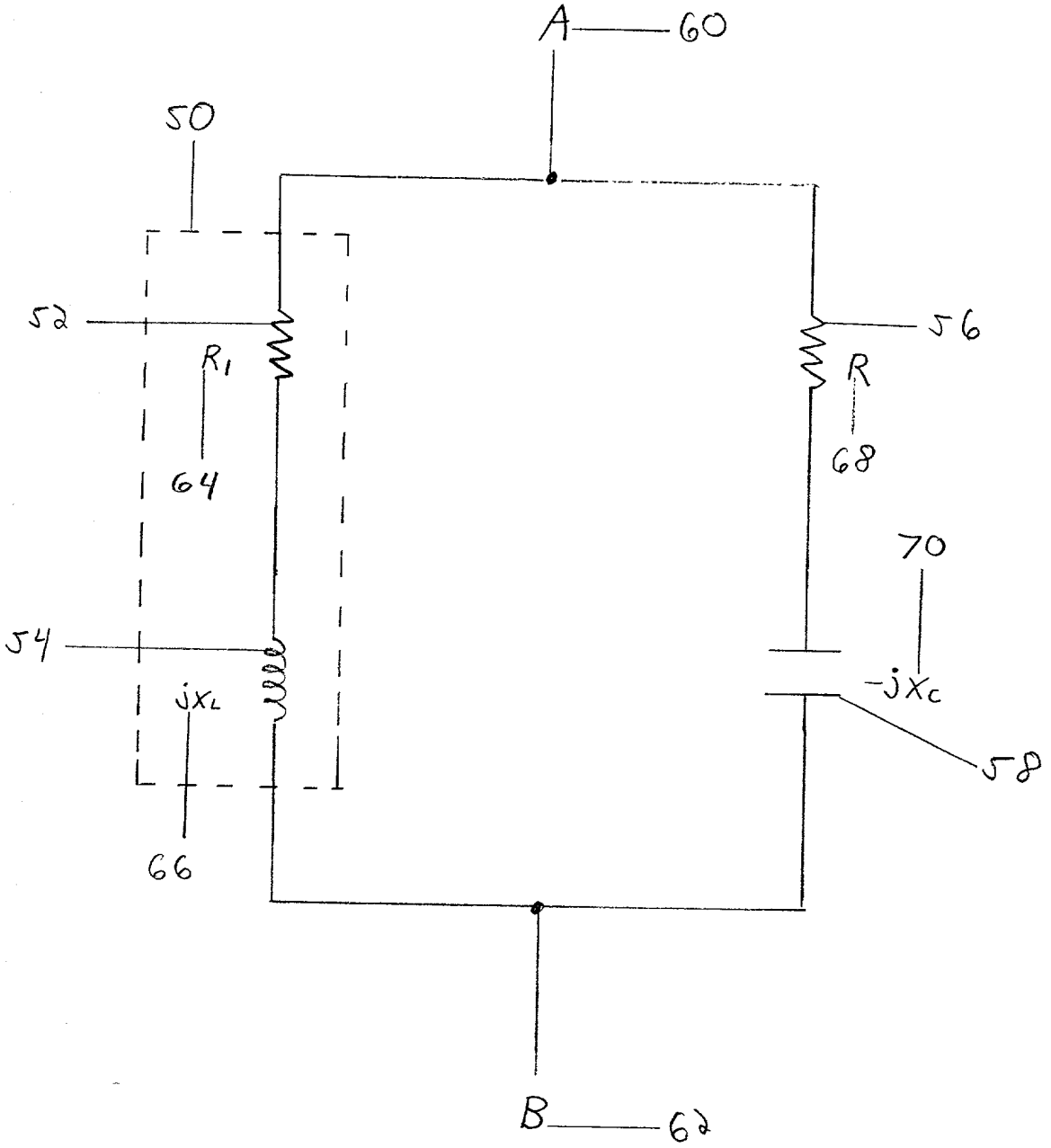


FIG. 3

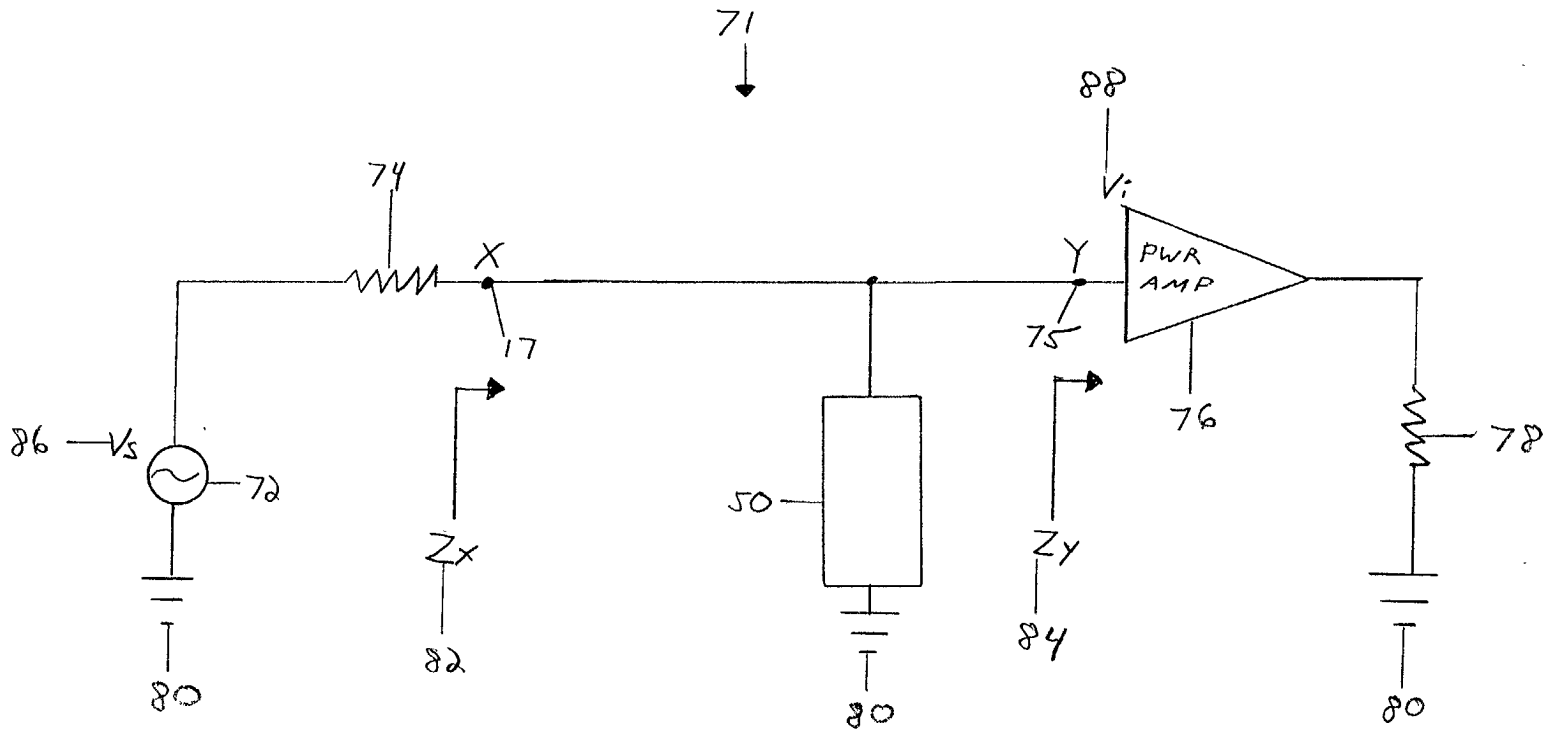


FIG. 4

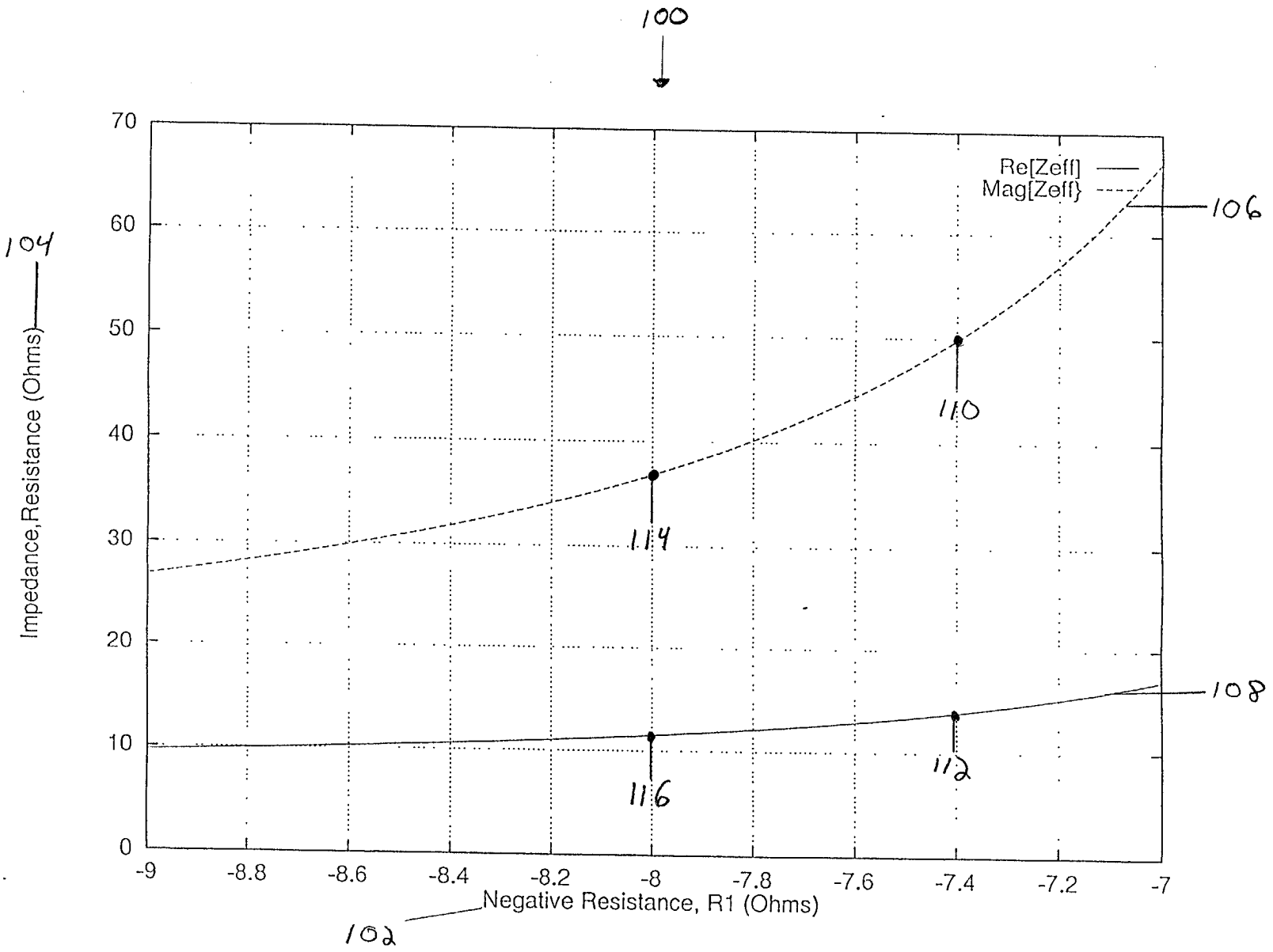
100
70
60
50
40
30
20
10
0
-9
-8.8
-8.6
-8.4
-8.2
-8
-7.8
-7.6
-7.4
-7.2
-7
Re[Zeff]
Mag[Zeff]
106
108
110
112
114
116
104
Impedance,Resistance (Ohms)
Negative Resistance, R1 (Ohms)
102

FIG. 5

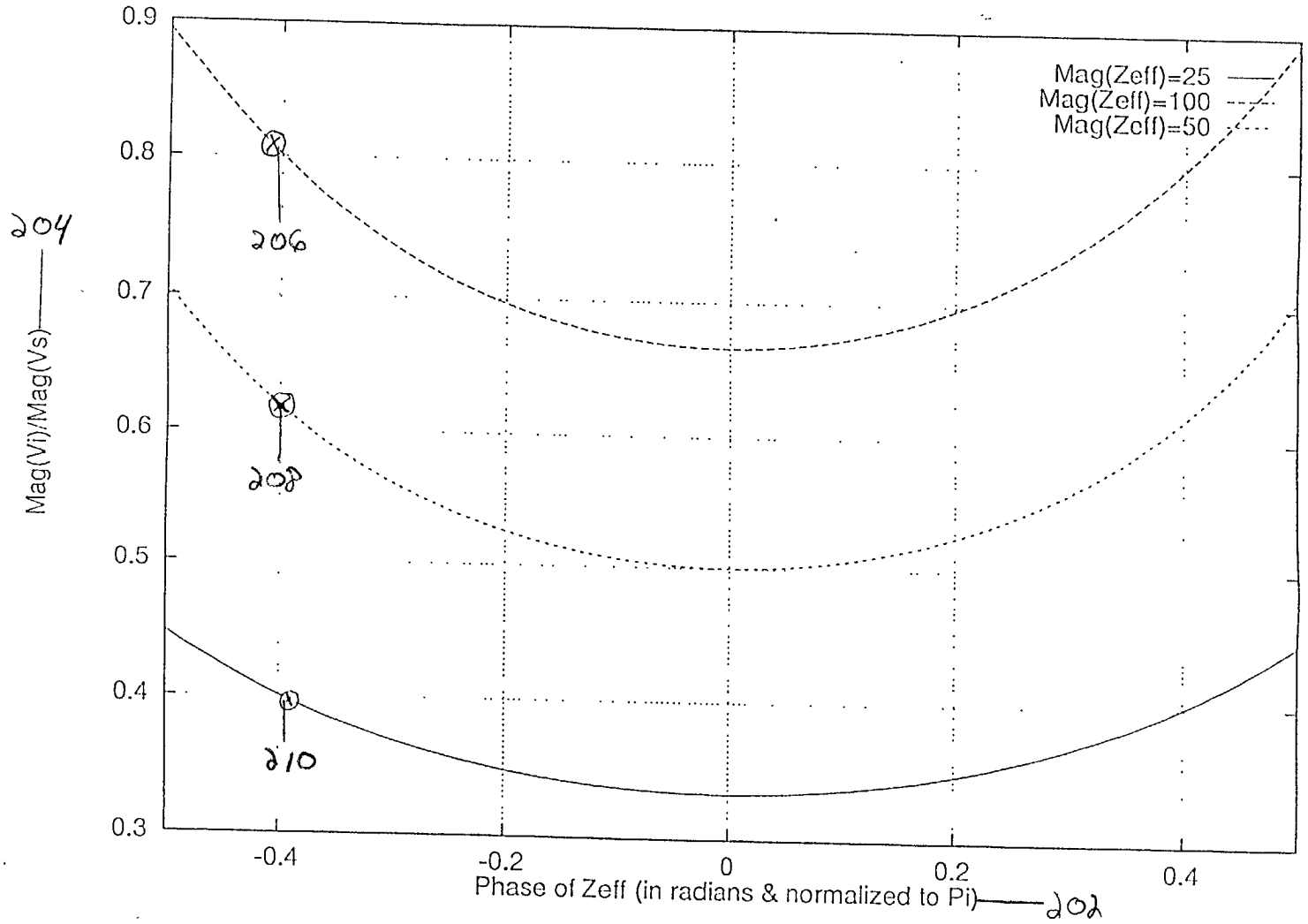
200
0.9
0.8
0.7
0.6
0.5
0.4
0.3
-0.4
-0.2
0
0.2
0.4
Mag(Vi)/Mag(Vs)
204
Phase of Zeff (in radians & normalized to Pi)
202
Mag(Zeff)=25
Mag(Zeff)=100
Mag(Zeff)=50
206
208
210

FIG. 6

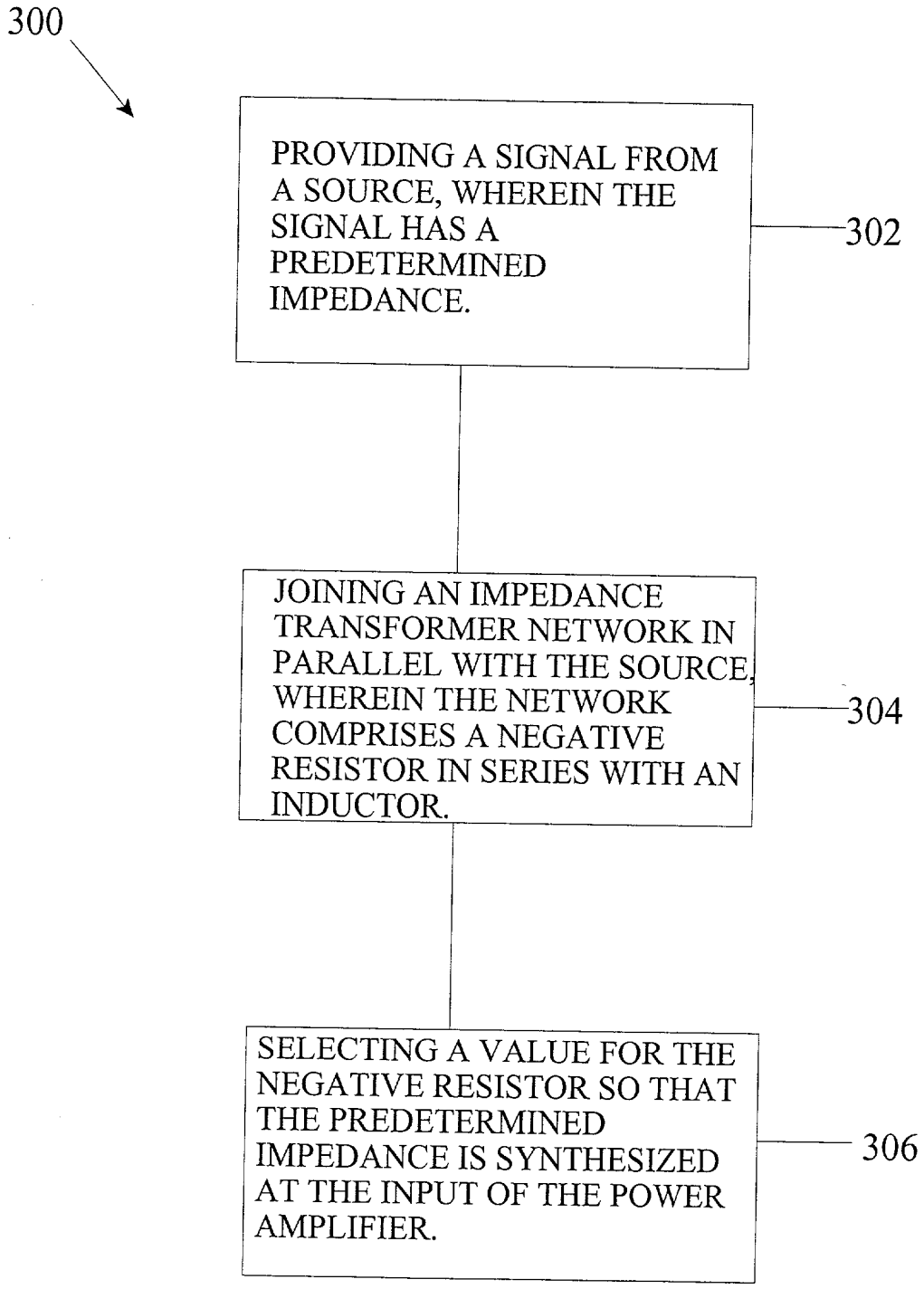
300
PROVIDING A SIGNAL FROM A SOURCE, WHEREIN THE SIGNAL HAS A PREDETERMINED IMPEDANCE.
302
JOINING AN IMPEDANCE TRANSFORMER NETWORK IN PARALLEL WITH THE SOURCE, WHEREIN THE NETWORK COMPRISES A NEGATIVE RESISTOR IN SERIES WITH AN INDUCTOR.
304
SELECTING A VALUE FOR THE NEGATIVE RESISTOR SO THAT THE PREDETERMINED IMPEDANCE IS SYNTHESIZED AT THE INPUT OF THE POWER AMPLIFIER.
306

FIG. 7